

BO (LARRY) LAN

Assistant Professor of Supply Chain Management
Global Supply Chain Management
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EDUCATION

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|--|---|------------|
| Iowa State University | 2015-2020 | |
| Ph.D., Supply Chain Management (Minor: Industrial Engineering), Dissertation: ‘Traveling Salesman Problem with time windows and drones (TSPTWD)’ Chair: Yoshinori Suzuki, professor in Supply Chain Management, Iowa State University. | | |
| Beijing University of Technology | Beijing, China | |
| Bachelor of Science | 1 ST Major—Applied Physics | 1987- 1993 |
| Bachelor of Economics | 2 ND Major—Business Administration | 1987- 1993 |

EMPLOYMENT

ACADEMIC

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| Assistant Professor, West Virginia University | 2020-present |
| Courses taught: Supply Chain Analytics, Supply Chain Network Design, Global Supply Chain Systems, Supply Chain Design and Innovation (MBA) | |
| Instructor, Research Assistant, Teaching Assistant, Iowa State University | 2015-2020 |
| Courses taught: Decision Tools for Logistics and Operations Management, Supply Chain Management, Physical Sciences for Elementary Education. | |

NON-ACADEMIC

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| Physics teacher, in several international high schools in Beijing, China. Taught AP Physics in English. | 2008-2014 |
| National customer service manager, supervisors of production planning, purchasing, deployment, Kraft Foods (Beijing Nabisco Food Co., Ltd.) | 1999-2007 |
| Finished Product Inventory Supervisor, TNT Logistics (China) | 1998-1999 |
| Product Supply Analyst of Logistics Department, San Miguel (China) Ltd. | 1996-1998 |
| Import and export clerk, Beijing Foreign Trade Corporation. | 1993-1996 |

RESEARCH INTEREST & METHODOLOGIES

Topics:

Vehicle routing and scheduling, metaheuristics, combinatorial optimization.

Methodologies:

Linear Programming, Mixed Integer Linear Programming, Network Analysis, Simulation,
Metaheuristics.

PUBLICATIONS IN REFEREED JOURNALS

Lan, Bo, Suzuki, Yoshinori. “Using Intermediate Points in Parcel Delivery Operations with Truck-Based Autonomous Drones”. *Decision Sciences* (2024) DOI: 10.1111/dec.12628

- Suzuki, Yoshinori; **Lan, Bo**. “Reducing the Cost of B2B Logistics via Night Deliveries: Does It Really Work?”. *Decision Sciences* (2021) DOI: 10.1111/deci.12522
- Suzuki, Yoshinori; **Lan, Bo**. “Cutting Fuel Consumption of Truckload Carriers by Using New Enhanced Refueling Policies”. *International Journal of Production Economics* 202 (2018): 69-80

WORKS IN PROGRESS

- Lan, Bo**; Suzuki, Yoshinori. “Traveling salesman problem with time windows and a drone-utilizing intermediate points (TSPTWD-IP)”. Submitted to *International Journal of Production Research* in October 2023.
- Lan, Bo**; Suzuki, Yoshinori. “Traveling salesman problem with time windows and multiple drones-utilizing intermediate points (TSPTWmD-IP)”. The project has been finished. Will rewrite the manuscript for specific journals. Targeted for *International Journal of Production Research*.
- Suzuki, Yoshinori; **Lan, Bo**. “Driver-Centric Vehicle Routing for Parcel Delivery Operations”. The mathematical model has been finished and simulation experiments were designed. Will finish simulations and submit the manuscript in summer 2024. Targeted for *Transportation Research Part E*.
- Lan, Bo**; Suzuki, Yoshinori. “Battery variable swapping for electric vehicles fixed route problem (BVS-EV-FRP)”. The mathematical model has been finished. Will test the model on more instances. Targeted for *Transportation Science*.

CONFERENCE PRESENTATIONS

- Lan, Bo**; Suzuki, Yoshinori. “Improving Parcel Delivery Operations by Using Autonomous Truck-Based Drones and Intermediate Points”. Presented at *INFORMS 2023 annual conference, October 18, Phoenix, AZ*.
- Lan, Bo**; Suzuki, Yoshinori. “Routing Electric Vehicles (EVs) with Swapping Battery Partially”. Presented in *Global Supply Chain Management seminar series at West Virginia University, September 26, 2023, Morgantown, WV*.
- Lan, Bo**; Suzuki, Yoshinori. “How much time will intermediate points save for a truck and a drone delivery system?”. Presented in *Global Supply Chain Management seminar series at West Virginia University, September 7, 2023, Morgantown, WV*.
- Lan, Bo**; Suzuki, Yoshinori. “Improving Parcel Delivery Operations by Using Autonomous Truck-Based Drones and Intermediate Points”. Presented at *Production and Operations Management Society 2023 annual conference, May 21-25, Orlando, FL*.
- Lan, Bo**; Suzuki, Yoshinori. “How much time will intermediate points save for a truck and a drone delivery system?”. Presented in *Digital Supply Networks & Logistics in Smart Manufacturing at West Virginia University, April 25, 2023, Morgantown, WV*.
- Lan, Bo**; Suzuki, Yoshinori. “Battery Variable Swapping Helps Electric Vehicles (EVs) Reduce Energy Consumption”. Presented at *Decision Sciences Institute 2021 annual conference, November 17-20, online virtual conference*.
- Lan, Bo**; Suzuki, Yoshinori. “How much time will intermediate points save for a truck and a drone delivery system?”. Presented at *Decision Sciences Institute 2020 annual conference, November 21-23, online virtual conference*.
- Suzuki, Yoshinori; **Lan, Bo**. “Night Delivery Vehicle Routing Problem- A mitigation to challenges of urban logistics”. Presented at *Decision Sciences Institute 2019 annual conference, November 23-25, New Orleans, LA*
- Lan, Bo**; Suzuki, Yoshinori. “Traveling Salesman Problem with Time Windows and a Drone: Launched and Received at Intermediate Points (Preliminary Results)”. Presented at *Decision Sciences Institute 2019 annual conference, November 23-25, New Orleans, LA*.

Lan, Bo; Suzuki, Yoshinori. “Dissertation: Traveling Salesman Problem with time windows and drones (TSPTWD)”. *Presented at 14th Annual Logistics Doctoral Symposium, April 6, 2019, Columbus, OH.*

Lan, Bo; Suzuki, Yoshinori. “Traveling Salesman Problem with time windows with a drone (TSPTWD): launched and received at intermediate points”. *Presented at Decision Sciences Institute 2018 annual conference, November 17-19, Chicago, IL.*

Suzuki, Yoshinori; **Lan, Bo.** “Choosing optimal refueling strategies considering changing fuel weight, congestion and gradient”. *Presented at Decision Sciences Institute 2017 annual conference, November 18-20, Washington D.C.*

AWARDS AND HONORS

A lifetime member of Beta Gamma Sigma (BGS), February 2021.

Graduate College Research Excellence Award, March 2020, Iowa State University.

Graduate College Teaching Excellence Award, November 2019, Iowa State University.

Donald J. Bowersox Doctoral Symposium Participant, CSCMP 2019 Annual Conference, Anaheim, CA

TEACHING

West Virginia University (2020-present)

GSCM 360: Supply Chain Analytics (undergraduate)

GSCM 425: Supply Chain Network Design (undergraduate)

GSCM 430: Supply Chain Technology (undergraduate; ERP system- SAP)

GSCM 470: Global Supply Chain Systems (undergraduate)

BADM 531: Supply Chain Design and Innovation (MBA)

Iowa State University (2015-2020)

SCM 301: Supply Chain Management (undergraduate)

SCM 460: Decision Tools for Logistics and Operations Management (undergraduate)

PHYS 102L (teaching assistant): Physical Sciences for Elementary Education (undergraduate)

SERVICE

Invited reviewer of:

Reviewer of Decision Sciences Institute (DSI) Conference 2020

Reviewer of Transportation Journal 2018

PROFESSIONAL MEMBERSHIPS

Council of Supply Chain Management Professionals (CSCMP) Since 2019

Decision Sciences Institute (DSI) Since 2017

The Institute for Operations Research and the Management Sciences (INFORMS) Since 2017

Production and Operations Management Society (POMS) Since 2017

PROFESSIONAL TRAINING

Professional Development Certificate for Virtual Reality Teaching provided by Victory XR in August~ December 2022.

Training of supply chain management -- Procurement, Warehousing, Transportation etc. provided by Kraft, Nabisco, TNT, San Miguel.

Trained as a physics teacher by the Education Commission of Beijing Municipal Government

PROGRAMMING SKILLS

Python, Julia, Gurobi, CPLEX, R, VB.NET, Matlab, Octave, Stata